

FACT SHEET

As required by LAC 33:IX.3111 for LPDES general permits, for draft Louisiana Pollutant Discharge Elimination System Permit No. LAG380000 to discharge to waters of the State of Louisiana as per LAC 33:IX.Chapter 31.

GENERAL PERMIT NO. LAG380000
AI 87051
PER20090001

GENERAL PERMIT FOR DISCHARGES FROM POTABLE WATER TREATMENT PLANTS

FACT SHEET FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE
ELIMINATION SYSTEM (LPDES) PERMIT FOR DISCHARGES FROM POTABLE
WATER TREATMENT PLANTS

Permit No.	LAG380000
Issuing Office:	State of Louisiana Department of Environmental Quality Office of Environmental Services Water Permits Division
Prepared By: (LAC 33:IX.3111.B.7)	Linda Gauthier Municipal and General Permits Section Water Permits Division (225) 219-0801
Permit Action:	Reissuance of a General Permit for Discharges from Potable Water Treatment Plants
Date Prepared	June 1, 2009

I. ISSUANCE OF A GENERAL PERMIT (LAC 33:IX:2515)

The Office of Environmental Services, Water Permits Division, through its permitting system authorized under the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), is responsible for ensuring that certain sources of wastewaters and storm water are identified, receive adequate treatment, and are disposed of in accordance with applicable state regulations. In accordance with the "Memorandum of Agreement" between the State of Louisiana and the U.S. Environmental Protection Agency and LAC 33:IX.2301, et seq., the Department has the authority to administer the LPDES General Permits Program.

Under the authority of Section 402 of the Clean Water Act, 40 CFR 123.24, and LAC 33:IX.2515.A.2.b, a general permit can be used to cover storm water point sources, point sources other than storm water point sources, or treatment works treating domestic sewage, if the sources or treatment works treating domestic sewage all:

1. involve the same or substantially similar types of operations;
2. discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
3. require the same effluent limitation or operating conditions, or standards for sewage sludge use or disposal;
4. require the same or similar monitoring; and
5. in the opinion of the state administrative authority, are more appropriately controlled under a general permit than under individual permits.

The general permit will authorize only discharges identified in Section B of the permit which typically are relatively small flows and are generally non-continuous in nature. This permit **shall not** apply to:

1. discharges which are likely to have unauthorized adverse effects upon threatened or endangered species, or on the critical habitat for these species as determined in conjunction with the U.S. Fish and Wildlife Service (USFWS);
2. discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless they are in compliance with requirements of the National Historic Preservation Act and any necessary activities to avoid or minimize impacts have been coordinated with the Louisiana State Historic Preservation Officer (*for questions, the operator should contact the Section 106 Review Coordinator, Office of Cultural Development, P. O. Box 44247, Baton Rouge, LA 70804 or telephone (225) 342-8170*);
3. discharges of wastewater determined by this Office to present an environmental risk or potential risk of discharging pollutants other than is intended to be regulated by this permit;
4. discharges which cause or contribute to the violation of a state water quality standard;
5. discharges that are mixed with other, non-covered discharge types unless those other discharges are in compliance with another LPDES permit;
6. facilities which discharge substances that are not addressed by pollution prevention plan requirements or would not be adequately regulated by the effluent limitations in this permit;

7. discharges which have limits assigned to them in the Louisiana Water Quality Management Plan or by an approved Waste Load Allocation which are different from the limits contained in this permit;
8. proposed discharges directly into a waterbody designated as an outstanding natural resource water, as defined in LAC 33:IX.1123.Table 3, except in accordance with LAC 33:IX.1119.C.4; and
9. discharges from operations classed as new sources or new discharges if the discharge will cause or contribute to the violation of water quality standards not addressed by the terms, conditions and schedules of this general permit (LAC 33:IX.2317.A.9).

At the discretion of this Office, coverage under this general permit **may not** be available to:

1. discharges from facilities not in compliance with a previously issued individual or general wastewater discharge permit;
2. discharges from facilities which have previously been in violation of state water quality regulations;
3. discharges from facilities which are located in an environmentally sensitive area;
4. discharges into water bodies designated by the State pursuant to Section 303(d) of the Clean Water Act;
5. discharges into waters that are likely to contain threatened or endangered species; or
6. discharges from facilities which owe any outstanding fees or fines to the Department.

The Department may deny coverage under this permit and require submittal of an application for an individual LPDES permit based on a review of the NOI or other information. This Office reserves the right to issue such facilities an individual LPDES permit with more appropriate limitations and conditions.

The state administrative authority may require any discharger authorized by a general permit to apply for and obtain an individual LPDES permit. Any interested person may petition the state administrative authority to require an individual permit in accordance with LAC 33:IX.2515.B.3.a.i-vii. NOIs for all facilities requesting coverage under this general permit will be posted to LDEQ's public internet site. Likewise, all facilities authorized to discharge under this general permit will be posted on LDEQ's public internet site. Cases where an individual LPDES permit may be required include the following:

- i. the discharger or treatment works treating domestic sewage is not in compliance with the conditions of the general LPDES permit;

- ii. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or treatment works treating domestic sewage;
- iii. effluent limitation guidelines are promulgated for point sources covered by the general LPDES permit;
- iv. a water quality management plan containing requirements applicable to such point sources is approved;
- v. circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;
- vi. standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general LPDES permit; or
- vii. the discharge(s) is a significant contributor of pollutants. In making this determination, the state administrative authority may consider the following factors:
 - (a) the location of the discharge with respect to waters of the state;
 - (b) the size of the discharge;
 - (c) the quantity and nature of the pollutants discharged to waters of the state; and
 - (d) other relevant factors (such as, but not limited to, critical flow and harmonic mean flow determinations, environmental considerations, site operational data, designated uses, water quality characteristics and other applicable water quality and regulatory requirements).

The facilities covered under this general permit have similar processes that generate similar effluents that would be assigned comparable effluent limitations and permit requirements if covered under an individual LPDES discharge permit. Given the large number of facilities in Louisiana that treat surface water or ground water to produce potable water, LDEQ considers this general permit the most effective means by which to implement and enforce Louisiana's Water Quality Regulations efficiently, consistently and practically.

II. COVERED ACTIVITY (LAC 33:IX.3111.B.1,2)

This LPDES permit is being reissued and will replace the Louisiana Department of Environmental Quality (LDEQ) LPDES General Permit LAG380000 for Discharges from Potable Water Treatment Plants. The permit was initially issued on December 17, 2004, and modified on September 1, 2007.

The proposed permit shall cover discharges of wastewater generated during the purification of surface water and ground water to produce potable water, where potable

is defined as "suitable for drinking". The reissued permit shall cover potable water treatment plants at any type of manufacturing, government, or commercial installation, including bottling plants. LPDES Permit coverage is required for each site/facility that produces potable water. The current version of the general permit that was issued on December 17, 2004, regulated the following types of discharges, and the reissued permit will continue to regulate these discharges from facilities/operations that are deemed eligible for coverage under the general permit:

RLP 1 Outfall 001: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies);

RLP 2 Outfall 002: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources);

RLP 3 Outfall 003: treated sanitary wastewater (less than 5,000 GPD); and

RLP 4 Outfall 004: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required).

Wastewater from Potable Water Treatment Plants:

- (1) Filter Backwash: water from the reverse flow through a filter used to unclog or clean the filter media.
- (2) Clarifier Blowdown: water discharged from a clarifier for the purpose of reducing the suspended solids concentration.
- (3) Clarifier Sludge: sludge from the clarifier that has less water content than clarifier blowdown that is discharged for the purpose of removing solids from the bottom of the clarifier. Same as clarifier blowdown with less water content.
- (4) Water Softening Wastewater: water discharged from the recharging of the zeolite media with a brine solution in an ion exchange column used to soften water. Also the water discharged from the dewatering of lime or lime and soda ash sludge used to soften water.
- (5) Iron and Manganese Removal Wastewater: wastewater from the backwashing of filters after oxidizing chemicals have been added to the source water to precipitate iron and manganese. Also the water discharge from the dewatering of lime or lime and soda ash sludge used to remove iron and manganese.

The following discharges **are not eligible for coverage** under this general permit.

1. facilities that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen determines that effluent

limitations for chlorides are necessary to protect water quality in the receiving waterbody.

Discharges covered by this permit are limited to:

RLP 1 Outfall 001: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies);

RLP 2 Outfall 002: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources);

RLP 3 Outfall 003: treated sanitary wastewater (less than 5,000 GPD); and

RLP 4 Outfall 004: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required).

III. OBTAINING COVERAGE

Notice of Intent (NOI) to be covered under this general permit shall be made using Form H2O-G or other approved equivalent which may be obtained from the LDEQ web page at <http://www.deq.louisiana.gov/portal/> - INFO ABOUT Water – Permits – LPDES Permits, Information, and Applications – LPDES Forms – LPDES Permit Application Forms – General Permit Notices of Intent - H2O-G or by calling (225) 219-5337. One NOI shall be submitted for each individual site that discharges wastewater from the production of potable water. The NOI shall be submitted to the Office of Environmental Services, Water Permits Division. Proposed facilities desiring coverage under this permit must submit an NOI at least ninety (90) days prior to commencement of discharge.

All persons operating a source or conducting an activity described in the permit that results in a discharge from a potable water-producing facility are eligible for coverage under this general permit and will become permittees authorized to discharge upon written notification by this Office of coverage under this general permit.

As stated in the public notice and in the permit, if activity is currently being conducted and has not been permitted, an NOI shall be submitted immediately.

NOIs that are submitted for authorization under the general permit undergo the same detailed review, evaluation and documentation as applications for an individual LPDES permit. The determination of each individual applicant's eligibility to be covered under the general permit is documented in a statement of basis.

After review of an NOI that is submitted to request coverage under the general permit, this Office will issue written notification to those applicants who are accepted for coverage under this general permit.

Dischargers who are currently permitted under the LPDES version of this permit that expires on December 31, 2009, are not required to submit a new NOI. Provided the applicability requirements of the reissued permit are met, these permitted dischargers will be automatically covered under the reissued LPDES permit; notification of coverage and a copy of the permit will be sent to each permittee after permit finalization. Permit conditions in the reissued permit are effective for these automatically-authorized permittees three (3) days after the postmark date of the notification of the facility's coverage under the reissued general permit.

If circumstances change in the future at a permitted facility that result in the addition or elimination of permitted outfalls, or a change in the composition of effluent from a permitted outfall, the permittee is required to notify the Water Permits Division in writing of the elimination/change of any outfalls that were identified in the NOI or the addition of outfalls that were not identified in the NOI that was submitted for general permit coverage. Notification of the addition or elimination/change of permitted outfalls, or a change in the composition of effluent from a permitted outfall, must be made in writing and must be accompanied by a site diagram that clearly illustrates and identifies current outfall locations at the site.

The permittee is required to submit a permit transfer request to the Permit Support Services either prior to or no later than 45 days after the permitted facility changes ownership/operator. The request must be made on the official LDEQ form NOC-1 which is available on the LDEQ website at: www.deq.louisiana.gov/portal/- PROGRAMS – Small Business/Small Community Assistance SB/SCAP/- Forms and Publications – Forms – Name/Operator/Owner Change Form. Any questions related to making a permit transfer should be directed to the LDEQ Application Verification Group at (225) 219-3292.

A printed hard copy of this permit may be obtained by contacting the LDEQ Water Permits Division at (225) 219-3181, or a copy can be downloaded from the LDEQ website at www.deq.louisiana.gov/portal/. Go through the following links to find the permit: INFO ABOUT Water – Permits – LPDES Permits, Information, and Applications – LPDES General Permits – LAG380000.

IV. DISCHARGE DESCRIPTION (LAC 33:IX.3111.B.2)

This permit **shall not** apply to:

1. discharges which are likely to have unauthorized adverse effects upon threatened or endangered species, or on the critical habitat for these species as determined in conjunction with the U.S. Fish and Wildlife Service (USFWS);

4. discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless they are in compliance with requirements of the National Historic Preservation Act and any necessary activities to avoid or minimize impacts have been coordinated with the Louisiana State Historic Preservation Officer (*for questions, the operator should contact the Section 106 Review Coordinator, Office of Cultural Development, P. O. Box 44247, Baton Rouge, LA 70804 or telephone (225) 342-8170*);
5. discharges of wastewater determined by this Office to present an environmental risk or potential risk of discharging pollutants other than is intended to be regulated by this permit;
4. discharges which cause or contribute to the violation of a state water quality standard;
7. discharges that are mixed with other, non-covered discharge types unless those other discharges are in compliance with another LPDES permit;
8. facilities which discharge substances that are not addressed by pollution prevention plan requirements or would not be adequately regulated by the effluent limitations in this permit;
10. discharges which have limits assigned to them in the Louisiana Water Quality Management Plan or by an approved Waste Load Allocation which are different from the limits contained in this permit;
11. proposed discharges directly into a waterbody designated as an outstanding natural resource water, as defined in LAC 33:IX.1123.Table 3, except in accordance with LAC 33:IX.1119.C.4; and
12. discharges from operations classed as new sources or new discharges if the discharge will cause or contribute to the violation of water quality standards not addressed by the terms, conditions and schedules of this general permit (LAC 33:IX.2317.A.9).

At the discretion of this Office, coverage under this general permit **may not** be available to:

1. discharges from facilities not in compliance with a previously issued individual or general wastewater discharge permit;
2. discharges from facilities which have previously been in violation of state water quality regulations;
7. discharges from facilities which are located in an environmentally sensitive area;
8. discharges into water bodies designated by the State pursuant to Section 303(d) of the Clean Water Act;

9. discharges into waters that are likely to contain threatened or endangered species; or
10. discharges from facilities which owe any outstanding fees or fines to the Department.

V. DISCHARGE LOCATION (LAC 33:IX.6519.A.1)

Within the geographic boundaries of the State of Louisiana.

VI. RECEIVING STREAM/USES (LAC 33:IX.6519.A.2)

The general permit covers discharges to any waterbody within the geographic boundaries of the State of Louisiana, as defined in LAC 33:IX.1123 and LAC 33:IX.2313. However, each individual facility covered under the general permit will only be allowed to discharge to the specific waterbody identified in that facility's Notice of Intent that is submitted for permit coverage.

The possible designated uses of the receiving streams are:

- Primary Contact Recreation
- Secondary Contact Recreation
- Propagation of Fish and Wildlife
- Oyster Propagation
- Drinking Water Supply
- Agriculture
- Outstanding Natural Resource Waters
- Limited Aquatic Life and Wildlife Use

VII. PROPOSED EFFLUENT LIMITATIONS AND/OR CONDITIONS

The specific effluent limitations and/or conditions will be found in the draft permit. Development of permit limits is detailed in the Draft Permit Rationale section below.

VIII. DRAFT PERMIT RATIONALE (LAC 33:IX.3111.B.4, LAC 33:IX.3305.B.1.d)

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The proposed effluent limitations and/or conditions are a continuation of those implemented in the Final Modified LPDES General Permit for Discharges from Potable Water Treatment Plants (LAG380000), issued effective September 1, 2007.

RLP4 Outfall 004 will allow the discharge of wastewater from potable water treatment plants that use a brine solution to regenerate filters and discharge relatively low volumes of wastewater if they discharge the wastewater to a receiving stream that has the capacity of assimilate the chlorides. The ability to assimilate the chlorides depends on the size of the receiving water body; the turbulence and flow rate of the receiving water

body; and the volume of wastewater that is discharged from the facility.

A water quality screen is a calculation used to determine whether water quality based permit limitations are required for a particular discharge, based on factors including effluent and receiving stream flow volumes and the in-stream standard for the parameter of concern. A water quality screen will be run for facilities that use a brine solution to regenerate filters and discharge to a receiving stream. The results of the water quality screen are used to establish a water quality based permit limit for chlorides that will ensure that discharges from the treatment system are protective of instream chloride standards for the particular receiving water body. General permit coverage will be extended to facilities where a water quality screen has determined that effluent limitations for chlorides are not required to protect for the designated uses of the receiving stream.

Only those potable water treatment plants whose discharges do not require a water quality based permit limitation for chlorides will be eligible for coverage under RLP 4 Outfall 4 of the general permit. Facilities that are permitted to discharge under RLP 4 Outfall 4 of the permit will be required to monitor their discharges periodically to determine the chlorides concentration of the discharges and to submit the results of the monitoring to LDEQ. The monitoring data that is received by LDEQ can be used to continue to evaluate the discharges from the permitted facilities to ensure that any future increase in discharges from the facility is properly permitted. Should the nature of a facility's discharges change dramatically over time, a new water quality screen can be conducted to determine if the facility's increased discharges require coverage under an individual LPDES permit. Should it be determined that an individual LPDES permit is required for a particular facility, general permit authorization will be terminated at the time that the individual permit is issued.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Two types of technology-based effluent limitations must be included in this general permit. With regard to conventional pollutants, CWA Section 301(b)(1)(E) requires effluent limitations based on best conventional pollution control technology (BCT). With regard to nonconventional and toxic pollutants, CWA Section 301(b)(2)(A), (C), and (D) requires effluent limitations based on best available pollution control technology economically achievable (BAT). BAT and BCT effluent limitations may never be less stringent than corresponding effluent limitations based on best practicable control technology (BPT).

Frequently, EPA adopts nationally applicable guidelines identifying the BPT, BCT, and BAT standards to which specific industrial categories and subcategories are subject. Until such guidelines are published, however, CWA Section 402(a)(1) requires that appropriate BCT and BAT effluent limitations be determined using best professional judgment (BPJ). National guidelines have not been established for BCT and BAT for discharges from potable water treatment plants.

Discharges of wastewaters from these facilities are non-continuous in nature. The determination of flow from these outfalls is derived by estimate of the flow. Because of this, in this permit effluent limitations for discharges that are intermittent or noncontinuous in nature will be in terms of daily maximum concentrations, as allowed by LAC 33:IX.2709.F.1 and 40 CFR 122.45.

This general permit will also regulate facilities with sanitary wastewater discharges totaling less than 5,000 gallons per day maximum expected flow. Sanitary wastewaters are regulated in accordance with LAC 33:IX.711 or 709.B and by BPJ utilizing the sanitary general permits issued by this Office. Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which expresses BOD₅ and TSS in terms of concentration.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS
(LAC 33:IX.3111.B.4)

1. GENERAL COMMENTS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

Discharges permitted under this general permit will be wastewater generated during the purification of surface water and groundwater to produce potable water. The permit is intended to cover only

RLP 1 Outfall 001: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies);

RLP 2 Outfall 002: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources);

RLP 3 Outfall 003: treated sanitary wastewater (less than 5,000 GPD); and

RLP 4 Outfall 004: potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required).

The draft permit limits and conditions are equivalent to those in the current LPDES General Permit for Discharges from Potable Water Treatment Plants (LAG380000), that

was issued on December 17, 2004, and modified on July 17, 2007. However, the proposed permit differs in several ways from the previous version of the permit that expires on December 31, 2009.

- (1) Updated the following *Other Conditions* to match current requirements in recently issued LPDES permits:
 - (a) Removed the stipulations that sanitary wastewater cannot be reported as a commingled outfall – if discharges covered by the general permit are commingled, the permittee must sample for all parameters under both effluent schedules, meet the most stringent effluent limitation for each parameter (if applicable), and submit DMRs for both effluent schedules;
 - (b) Expanded the section on 24-hour Oral Reporting requirements; and
 - (c) Added Section S - Flow Measurement.
- (2) Changed "Permits Division" to "Water Permits Division";
- (3) Clarified that permitted dischargers under the version of the permit that expires on December 31, 2009, will be automatically covered under the reissued permit provided applicability conditions of the reissued permit are met;
- (4) Changed the discharge limitation for Fecal coliform from 400 colonies/100 ml weekly average to 400 colonies/100 ml daily maximum;
- (5) Changed the discharge limitations for Treated Sanitary Wastewater from weekly average effluent limitations to daily maximum effluent limitations as per LAC 33:IX.2709.D.
- (6) Although all NOIs submitted for coverage under the general permit have always undergone an extensive review to ascertain that the discharge is eligible for coverage under a general permit, the reissuance permit now includes specific language to describe instances where applicants for coverage under the permit may be required to apply for individual LPDES permit coverage. Cases where an individual LPDES permit may be required are described in *Other Conditions*, Sections H and O;
- (7) Updated language in the permit to instruct permittees to use test methods prescribed in the latest approved 40 CFR 136 in order to ensure that they are using the most current and sensitive parameter-specific test methods; and
- (8) Excludes coverage for proposed discharges into a waterbody designated as an outstanding natural resource water, as defined in LAC 33:IX.1123.Table 3, except in accordance with LAC 33:IX.1119.C.4.

2. LIMITED PARAMETERS

a. **pH** - Best Conventional Pollutant Control Technology (BCT) based on Best Professional Judgment; LAC 33:IX.5905.C. Effluent limitation of 6.0 minimum to 9.0 maximum standard units will be included in this permit. This effluent limitation was included in the previously issued LPDES General Permit for Discharges from Potable Water Treatment Plants and previously issued individual LPDES permits. This effluent limitation can also be found in the EPA Region VI Storm Water Guidance Document and in previous individual and general permits issued by the Office of Environmental Services (formerly the Office of Water Resources).

b. **BOD₅** - Best Conventional Pollutant Control Technology (BCT) based on Best Professional Judgment; LAC 33:IX.711 and LAC 33:IX.5905.A. This effluent limitation was included as daily maximum and weekly average limitations in the previously issued LPDES General Permit for Discharges from Potable Water Treatment Plants; the LPDES Class II General Sanitary Permits; previous individual and general permits issued by the Office of Environmental Services (formerly the Office of Water Resources). In accordance with LAC 33:IX.2709.D, the effluent limitation for BOD₅ is included in the renewal permit as daily maximum.

c. **Total Suspended Solids (TSS)** - Best Conventional Pollutant Control Technology based on Best Professional Judgment (BPJ); TSS limitation of 45 mg/L daily maximum (for sewage treatment plants) based on LAC 33:IX.2709.D; TSS limitation of 135 mg/L Daily Maximum (facilities that use oxidation ponds for treatment) in accordance with LAC 33:IX.5911; TSS limitation of 30 mg/l monthly average and 45 mg/l Daily Maximum for discharges from filter backwash, clarifier sludge, or clarifier blowdown from treatment systems that treat raw surface water and ground water sources, and treatment systems that use a brine solution to regenerate filters. Effluent limitations based on the LPDES Exterior Vehicle and Equipment Wash Wastewater General Permit; the previously issued LPDES General Permit for Discharges from Potable Water Treatment Plants; LPDES Class I and II General Sanitary Permits; LPDES General Permit for Discharges from Cement, Concrete, and Asphalt Facilities; previous individual and general permits issued by the Office of Environmental Services (formerly the Office of Water Resources).

The effluent limitations do not apply to clarifier and filter backwash that are returned to the same waterbody from which they came unless this Office makes a determination that the receiving stream does not have sufficient flow to receive the wastewater. If the discharge goes to a waterbody other than the one from which the source water was obtained, then the TSS limits apply.

Under the original version of this permit and continuing with this permit, higher TSS limits (*90 mg/L monthly average and 135 mg/L daily maximum*) are allowed from treatment plants that treat raw water from groundwater sources and discharge to the Mississippi River, the Atchafalaya River, the Red River, or any other receiving stream with a flow equal to or greater than the 7Q10 critical flow for the Red River at Shreveport

(1,275 cfs). The increased TSS levels are being allowed because the water quality data for these streams was reviewed during the preparation of the Sand and Gravel General Permit. That review indicated that this level of suspended solids will not be detrimental to the water quality of these rivers when considering the high background levels of suspended solids commonly found in these rivers. The settling ponds that are commonly used for treatment of suspended solids at potable water treatment plants may also have elevated values for TSS from algae growth just as oxidation ponds used to treat sanitary sewage have elevated values for TSS. Therefore, the higher TSS limitations allowed for sanitary discharges in the Class II Sanitary General Permit are being required for these facilities.

d. **Fecal coliform** – The fecal coliform limit has been changed from weekly average to daily maximum as per LAC 33:IX.2709.D.

The permit establishes the Fecal coliform limitations to protect water quality commensurate with the most stringent designated use as described at LAC 33:IX.1113.C.5. The most stringent bacteria standards are established for water bodies that have been designated as Primary Contact Recreation water bodies. Discharges of treated sanitary wastewater are intermittent, therefore, the daily maximum limit of 400/100 mL is proposed as the fecal coliform limit in the permit. This limit is being proposed through Best Professional Judgment in order to ensure that the water quality standards are not exceeded in water bodies that are designated for Primary Contact Recreation. Existing facilities have demonstrated an ability to comply with this limitation using present available technology.

The BCT effluent limitations for fecal coliform which will be assigned to facilities located in areas which have oyster propagation as a designated use is a daily maximum limitation of 43 fecal colonies/100 mL, in accordance with LAC 33:IX.1113.C.5.d. This effluent limitation was included as the daily maximum limitation in the recently issued LPDES General Permit for Discharges from LPDES General Permit for Discharges from Cement, Concrete and Asphalt Facilities, the LPDES General Permit for Exterior Vehicle Wash Wastewater, and the LPDES General permit for Discharges from Automotive Dealerships, Paint and Body Shops, Automotive Repair and Maintenance Shops, Motorcycle Dealerships, and Recreational Vehicle Dealerships.

e. **Clarifying Agents Used** – This Office has historically required these facilities to report the clarifying agent and amount used in the water treatment process. This requirement is based on BPJ, the LPDES Potable Water Treatment Plant General Permit and previously issued industrial individual permits.

f. **Total Recoverable Iron** - Monitoring and reporting have been included for the discharge of wastewater that results from iron and manganese removal. This discharge, if not properly handled, can violate the narrative criteria for color and aesthetics found in LAC 33:IX.1113.B.1 and 2. Wastewater discharged as a result of iron and manganese removal from source water shall be monitored for Total Recoverable Iron if an iron removal treatment unit is used. Should this monitoring indicate a potential or real impact on the receiving stream from this discharge, an individual permit will be issued and coverage under the general permit will be revoked.

g. **Chlorides** - When removing hardness from source water by ion exchange softening, a sodium chloride or potassium chloride solution is used to regenerate the cation exchange media in the column. When this solution is passed through the column, the sodium or potassium ions replace the metal ions (Ca, Mg, and other bivalent metal ions) that have been removed from the source water by the cation exchange media. The metals in the cation exchange media attach to the chloride ions and are removed from the column with the regeneration rinse water. The resulting discharge of regeneration rinse water is high in chlorides. Therefore, a chloride limitation of 250 mg/L is being required. This water quality-based effluent limitation is derived from LAC 33:IX.1113.C.2 which establishes general criteria for chlorides. The regulation states that a discharge shall not cause in-stream concentrations of chlorides to exceed 250 mg/L. This limitation was selected because many of the potable water treatment plants will be discharging to no flow or low flow streams. In these cases the limitation must apply to the end of pipe discharges in order to assure that water quality is maintained in the receiving streams. This limitation is also being applied to all other facilities covered by this general permit including those that discharge to high and moderate flow streams. Because a general permit must set standard conditions that apply to all facilities with coverage under the permit, facilities that are located on moderate to high flow streams may find this limit more stringent than water quality limits which would be established specifically for the receiving stream. However, if this proves to be a burden on the facility, an individual permit may be requested. Facilities located on streams that require a chloride limitation more stringent than 250 mg/L will receive an individual permit based on water quality.

In addition to outfall specific conditions, ongoing pollution prevention measures are required for the facility in Permit Other Conditions, Section I. The permittee is required to conduct a visual inspection of the facility and to make a report annually to determine if any discharges other than those covered under the permit exist. If other discharges are discovered, the permittee is required to submit a permit modification request immediately upon discovery.

C. MONITORING FREQUENCIES FOR LIMITED PARAMETERS

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity (LAC 33:IX.2715/40 CFR 122.48(b)) and to assure compliance with permit limitations (LAC 33:IX.2707.I.1/40 CFR 122.44(I)(1)).

The monitoring frequencies assigned to each parameter in the draft permit are equivalent to the monitoring frequencies used in existing LPDES general permits and in individual LPDES permits issued by this Office.

Flow: 1/month for potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required); and 1/6 months for sanitary wastewater discharges (less than 5,000 GPD).

pH: 1/month for potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required); and 1/6 months for sanitary wastewater discharges (less than 5,000 GPD).

BOD₅: 1/6 months for sanitary wastewater discharges (less than 5,000 GPD).

TSS: 1/month for potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required); and 1/6 months for sanitary wastewater discharges (less than 5,000 GPD).

Clarifying Agents Used: 1/month for potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources); and potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine

solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required).

Chlorides: 1/3 months for potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources); and potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required).

Facilities that do not utilize a sodium chloride solution during the source water treatment process shall specify "N/R" (not required) on the DMR under the Remarks section. Facilities that do utilize a sodium chloride solution during the source water treatment process but do not discharge wastewater from the sodium chloride treatment process shall specify "N/R" (not required) on the DMR under the Remarks section.

Total Recoverable Iron: 1/3 months for potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from surface waterbodies); potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (raw water from groundwater sources); and potable water treatment plant filter backwash, clarifier blowdown, water softening, iron and manganese removal, and disinfection of source water (from treatment systems that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required).

Monitoring for Total Recoverable Iron is only required if an iron removal treatment is used.

Fecal Coliform: 1/6 months for sanitary wastewater discharges (less than 5,000 GPD).

IX. PUBLIC NOTICES (LAC 33:IX.3111.B.6)

The public notice describes the procedures for the formulation of final determinations.

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested person may submit written comments on the permit. Any interested person may also submit a written request for clarification of issues related to the content of the general permit or the permit issuance process. Interested persons may also submit written requests for notification of the final permit decision or to request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall state

the nature of the issues proposed to be raised in the hearing. The public notice specifies that written comments and/or written requests shall be submitted to the LDEQ Public Participation Group and that written comments and/or written requests must be received by the Department by a specific deadline.

Public notice will be published in:

THE ADVOCATE of Baton Rouge
LAKE CHARLES AMERICAN PRESS
THE ADVERTISER of Lafayette
THE TIMES of Shreveport
THE TIMES PICAYUNE of New Orleans
THE NEWS-STAR of Monroe
THE TOWN TALK of Alexandria
THE COURIER of Houma

LDEQ Permits Public Notice Mailing List

LDEQ Permits Public Web Page at
<http://www3.deq.louisiana.gov/news/pubnotice/default.asp>.

The draft permit, NOI, and fact sheet will be available for review at the LDEQ Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana, during the hours of 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays).

The Water Permits Division will send notification of the final permit decision to each person who has submitted written comments or a written request for notification of the final decision.

X. ENDANGERED SPECIES ACT

The proposed limitations on these discharges are sufficiently stringent to assure state water quality standards for both aquatic life and human health protection will be met for receiving stream throughout the state. The effluent limitations established in this permit mirror those found in the current permit that became effective on January 1, 2005.

The United States Fish and Wildlife Service (USFWS) issued a letter of no objection for the issuance of the current LPDES LAG380000 permit that expires December 31, 2009. Section II.3 of the 2008-2009 Implementation Strategy for the Louisiana Department of Environmental Quality and the U.S. Fish and Wildlife Service Memorandum of Understanding (MOU) from the USFWS dated November 17, 2008, notes that no coordination with the USFWS is required for the reissuance of LAG380000. The MOU notes that the effluent limitations in the permit are established to ensure the protection of aquatic life and maintenance of the receiving waters. Therefore, no coordination is required because the general permit is not likely to adversely affect listed species.

In 2004, the USFWS concurred with our general determination and with our finding that adoption of the NOI procedures are appropriate to assure that automatic authorization to

discharge under this general permit is unlikely to adversely affect the conservation of threatened and endangered species in receiving water bodies throughout the state.

Section II.3 of the 2008-2009 Implementation Strategy for the Louisiana Department of Environmental Quality and the U.S. Fish and Wildlife Service Memorandum of Understanding (MOU) dated November 17, 2008, states that no further coordination with the USFWS is required for the renewal of this general permit because the permit does not contain any changes/modifications in permit limitations or it contains more stringent limitations than the 2004 version of the permit. The USFWS has already reviewed and provided concurrence for the 2004 version of the permit. In accordance with the 2008 MOU, concurrence from the USFWS that the draft general permit adequately addresses impacts that discharges may have on endangered and/or threatened species is not required for the reissuance of this general permit.

XI. HISTORICAL PRESERVATION ACT

An operator must be in compliance with the National Historic Preservation Act to be eligible for coverage under this general permit. Discharges may be authorized under this permit only if:

- (1) The proposed discharge(s) from operating a potable water treatment plant will not affect a property that is listed or eligible for listing on the National Register of Historic Places, unless the discharge(s) is in compliance with requirements of the National Historic Preservation Act and any necessary activities to avoid or minimize impacts have been coordinated with the Louisiana State Historic Preservation Officer (SHPO); and
- (2) If applicable, the operator has obtained and is in compliance with a written agreement with the SHPO that outlines all measures that will be undertaken to mitigate or prevent adverse effects to the historic property.

The state finds that adoption of the reissued permit is unlikely to have unauthorized adverse effects upon properties listed or eligible for listing in the National Register of Historic Places provided that permittees meet the applicability requirements contained in the permit. The draft permit and fact sheet have been submitted to the State Historic Preservation Office for their comments and/or concurrence with the state's determination.

XII. FEES

At the time of proposed issuance, the annual maintenance and surveillance fee for site-specific coverage under this permit for individual sites will be \$345.00. A twenty percent surcharge (up to a maximum surcharge of \$150.00) will be added to the annual fee for individual sites located in the following basins: Atchafalaya River, Barataria, Lake Pontchartrain, Mississippi River, and Terrebonne. Monies collected through this surcharge are deposited in the Oyster Sanitation Fund, which is used to support

molluscan sanitation efforts. The agency may adjust fee amounts at a later date by promulgation of same, in the Louisiana Administrative Code.

XIII. SCHEDULE OF COMPLIANCE

The permittee is to be in compliance with the permit limitations and conditions as of the date of coverage under the general permit.

XIV. STATE WATER QUALITY STANDARDS

Pursuant to the Louisiana Environmental Quality Act (LA. R.S. 30:2001, et seq.) and in conformity with the Clean Water Act the state of Louisiana has established "... water quality standards to prohibit, control, or abate water pollution."

Each NOI that is received by LDEQ to request coverage under the permit undergoes a complete evaluation to ascertain that the subject facility or project can be adequately regulated by coverage under the general permit. The evaluation is conducted prior to issuing a general permit authorization number to the facility or project, and to confirm that the facility or project is eligible for coverage under the general permit. The evaluation includes, but is not limited to, assessing the reasonable potential for the discharge of pollutants from the facility to cause or contribute to a violation of water quality standards. The scientist who evaluates the NOI may request additional information from the applicant, and, if necessary the facility may be visited to clarify information and to confirm that the facility is eligible for general permit coverage. The scientist determines which LDEQ basin subsegment the facility discharges will enter, the route of the facility's discharges, the designated uses of the receiving water body, and the potential to impact threatened or endangered species that may exist in the basin subsegment, in order to confirm that the facility meets the eligibility requirements of the general permit prior to issuing a permit authorization number to the facility.

The proposed permit would require as an eligibility condition that covered discharges not cause or have the reasonable potential to cause or contribute to a violation of a state water quality standard. If a discharge is known to be doing such the operator must seek coverage under an alternative permit. Where a discharger is already operating under the permit and is later discovered to cause or have the reasonable potential to cause or contribute to the violation of a state water quality standard, the permitting authority will notify the operator of such violation(s) and the permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions in the pollution prevention plan. If violations remain or recur then coverage under the permit will be terminated after alternate coverage is obtained. Compliance with this requirement does not preclude any enforcement activity as provided by the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.) for the underlying violation. A permit reopener clause is included in the permit.

Should any TMDLs and wasteload allocations which address these discharges be developed, implementation within the required time frames for application of these requirements will be completed. After a complete evaluation is conducted to assess the reasonable potential for the discharge of pollutants from the facility to cause or contribute to further violation of water quality standards for any known impairments, coverage under the general permit may be denied and regulation under an individual permit required if more stringent limitations than the limitations contained in the general permit are required for protection of the impaired receiving stream.

Where an approved or established TMDL has not specified a wasteload allocation (WLA) applicable to discharges covered by this general permit, but has not specifically excluded these discharges, it will generally be assumed that discharges from facilities permitted under this general permit are consistent with approved TMDLs.

Each NOI received to request authorization under this LPDES general permit will be evaluated by the Agency to assure any WLAs are met, and that in-stream standards will not be violated by the proposed discharges. Coverage under the general permit may be denied and regulation under an individual permit required if more stringent limitations than the limitations contained in the general permit are required for protection of a receiving stream.

In order to meet the assumptions and requirements of established or approved TMDLs, coverage under this general permit may be denied and regulation under an individual permit required. Facilities that discharge to a specific 303(d) listed impaired water body will not be eligible for coverage under this general permit if the TMDL for that particular water body specifically precludes discharges covered by this general permit, or where the discharge can be expected to cause or contribute to the water quality impairment addressed by the TMDL.

The general criteria and numerical criteria which make up the stream standards are provided in the "Louisiana Surface Water Quality Standards", (LAC 33:IX.11, amended as of September 1989, March 1991, April 1994, August 1994, July 1995, November 1996, October 1998, December 1999, March 2001, March 2002, August 2002, September 2003, July 2004, November 2004, April 2005, May 2006, May 2007, and September 2008).

For the purposes of assuring that state water quality standards are achieved, the following language is being included in the general permit (*Other Conditions*, Section O.1) along with a reopener clause (*Other Conditions*, Section H).

LAC 33:IX.1113 describes numerical and general criteria that apply to all water bodies of the State. Criteria are elements of the water quality regulations which set limitations on the permissible amounts of a substance or other characteristics

of state waters. The General Criteria, as described in the Louisiana Administrative Code, limit discharges to maintain aesthetics, color, turbidity, the biologic and aquatic community integrity, and many other elements in the receiving water body. Any noncompliance with the General or Numerical Criteria is not authorized under this permit.

Discharges from facilities permitted under LPDES general permits typically consist of low volume flows, and discharges that are intermittent in nature. This general permit is applicable to very specific types of facilities and allows very limited types of discharges that specifically occur at facilities that are eligible for coverage under this permit. The effluent limitations and other conditions are determined to be sufficient to assure protection to state waters. Pursuant to LAC 33:IX.2317.A.9, new source discharges or new discharges of wastewater from a facility whose discharges are in compliance with the general permit requirements should not adversely impact water quality of 303(d) listed impaired water bodies nor should they cause or contribute to the violation of state water quality standards in receiving water bodies throughout the state, including 303(d) impaired water bodies. Discharges from facilities which are authorized under this general permit will not negatively impact the water quality of receiving streams because permitted facilities are required to be in compliance with the general permit requirements immediately upon coverage by the permit. In accordance with *Other Conditions*, Sections H and O, measures can be taken by the permitting authority to prohibit any discharge that is not protective of state water quality standards.

Discharges of wastewater and storm water from eligible facilities are relatively small flows and are generally non-continuous in nature. The experience which this Office has in permitting these discharges, and the absence of any identified adverse effects to the receiving water bodies for discharges under previously-issued permits, support the adequacy of continuing the previously applied conditions and effluent limitations to assure that water quality standards will be met, as supported in the following discussion and above in Item VII of this Fact Sheet.

The permit duplicates the parameters, limitations, and requirements found in the LPDES General Permit for Discharges from Potable Water Treatment Plants modified on July 17, 2007.

EPA Region VI concurred that the effluent limitations established in the 2005 permit ensured attainment of water quality standards. The state does not believe any water quality issues have developed that were not considered when the 2005 permit was prepared; therefore, that determination is still valid and these limitations are proposed for the reissued permit. EPA Region VI approved this reissuance permit by letter dated April 6, 2009.

The parameters and limits contained in the draft permit will offer adequate protection to any streams listed on the LDEQ Section 303(d) List of Impaired Waterbodies. DO impacted streams will be adequately protected by the BOD₅ limitations included in the permit.

XV. FINAL DETERMINATION

The availability of an LPDES General Permit for Discharges from Potable Water Treatment Plants streamlines the permit process for certain sources that generate common types of wastewaters that can be effectively treated by common types of treatment systems, to meet the effluent limitations contained in the permit. LDEQ streamlines the permit process for low impact dischargers by utilizing a general permit to regulate discharges from facilities or operations with discharges from Potable Water Treatment Plants. Utilization of a general permit to permit these facilities and discharges allows the Department to devote more resources to issuing individual LPDES permits to industrial facilities with discharges that require more regulatory oversight while ensuring that discharges permitted under this general permit are protective of state water quality standards in receiving streams throughout the state.

This agency has determined that discharges covered by this authorization can be adequately treated by common types of treatment systems to meet the effluent limitations contained in the general permit. The resulting discharges that are in compliance with the permit limitations should not pose any reasonable potential to cause or contribute to any existing water quality or 303(d) listed impairment.

The effluent limitations and monitoring requirements of this permit are adequate to protect for the designated uses and water quality standards of Louisiana.

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue the permit for the discharges described above in Parts I and III.